

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) An apparatus for optically pumping a laser-active solid body with pumping light coupled into the solid body through ~~only~~ an end surface of the solid body, the apparatus comprising:

a laser-active solid body including an end surface through which pumping light is coupled into the solid body and a lateral surface through which pumping light exits the solid body;

a reflector surrounding the laser-active solid body at a distance from the lateral surface of the solid body for reflecting light that exits the solid body back towards the solid body, thereby forming an annular gap between the solid body and the reflector; and

a surface for diffusively scattering and spatially homogenizing light that is coupled into the solid body through the end surface of the solid body and that exits the solid body through the lateral surface, wherein the surface is selected from the group consisting of the lateral surface and a surface of the reflector;

wherein the surface for diffusing light is the lateral surface and the reflector has a surface that diffusely reflects the exiting pumping light.

2-3. (Canceled)

4. (Previously presented) The apparatus of claim 2, wherein the reflector has a smooth-mirror-like reflecting surface for reflecting the exiting pumping light.

5. (Currently amended) ~~[[The]]~~ An apparatus of claim 1, for optically pumping a laser-active solid body with pumping light coupled into the solid body through only an end surface of the solid body, the apparatus comprising:

a laser-active solid body including an end surface through which pumping light is coupled into the solid body and a lateral surface through which pumping light exits the solid body;

a reflector surrounding the laser-active solid body at a distance from the lateral surface of the solid body for reflecting light that exits the solid body back towards the solid body, thereby forming an annular gap between the solid body and the reflector; and

a surface for diffusively scattering and spatially homogenizing light that is coupled into the solid body through the end surface of the solid body and that exits the solid body through the lateral surface, wherein the surface for diffusing light is the surface of the reflector.

6. (Original) The apparatus of claim 5, wherein the lateral surface of the solid body also has a surface that diffuses the exiting pumping light.

7. (Original) The apparatus of claim 5, wherein the lateral surface of the solid body has a mirror-like smooth surface.

8. (Original) The apparatus of claim 1, further comprising a medium disposed on the outside of the lateral surface having a higher refractive index than the solid body.

9. (Previously presented) The apparatus of claim 8, wherein the medium is disposed in the form of a layer on the lateral surface.

10. (Currently amended) ~~[[The]]~~ An apparatus of claim 8, for optically pumping a laser-active solid body with pumping light coupled into the solid body through only an end surface of the solid body, the apparatus comprising:

a laser-active solid body including an end surface through which pumping light is coupled into the solid body and a lateral surface through which pumping light exits the solid body;

a reflector surrounding the laser-active solid body at a distance from the lateral surface of the solid body for reflecting light that exits the solid body back towards the solid body, thereby forming an annular gap between the solid body and the reflector;

a surface for diffusively scattering and spatially homogenizing light that is coupled into the solid body through the end surface of the solid body and that exits the solid body through the lateral surface, wherein the surface is selected from the group consisting of the lateral surface and a surface of the reflector; and

a medium disposed on the outside of the lateral surface having a higher refractive index than the solid body;

wherein the reflector has a surface that diffusely reflects exiting pumping light.

11. (Previously presented) The apparatus of claim 1, wherein a cooling medium flows through the gap between the solid body and the reflector.

12. (Original) The apparatus of claim 11, wherein the cooling medium is water.

13. (Previously presented) The apparatus of claim 1, wherein at least 3% of the pumping light coupled into the solid body through the end surface is diffusely distributed in the solid body.

14. (Previously presented) The apparatus of claim 1, wherein at least 20% of the pumping light coupled into the solid body through the front side is diffusely distributed in the solid body.

15. (Previously presented) The apparatus of claim 1, wherein at least 40% of the pumping light coupled into the solid body through the front side is diffusely distributed in the solid body.

16. (New) The apparatus of claim 5, wherein a cooling medium flows through the gap between the solid body and the reflector.

17. (New) The apparatus of claim 5, wherein at least 3% of the pumping light coupled into the solid body through the end surface is diffusely distributed in the solid body.

18. (New) The apparatus of claim 5, further comprising a medium disposed on the outside of the lateral surface having a higher refractive index than the solid body.

19. (New) The apparatus of claim 10, wherein a cooling medium flows through the gap between the solid body and the reflector.

20. (New) The apparatus of claim 10, wherein at least 3% of the pumping light coupled into the solid body through the end surface is diffusely distributed in the solid body.

21. (New) The apparatus of claim 10, wherein the surface for diffusing light is the lateral surface.

22. (New) The apparatus of claim 10, further comprising a medium disposed on the outside of the lateral surface having a higher refractive index than the solid body.